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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,137	04/16/2004	Reinhold A. Barlian	BARTEC 68395	8760
24201	7590	02/22/2006	EXAMINER	
FULWIDER PATTON 6060 CENTER DRIVE 10TH FLOOR LOS ANGELES, CA 90045			MAI, ANH T	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/826,137

Applicant(s)

BARLIAN ET AL.

Examiner

Anh T. Mai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-41 is/are pending in the application.
- 4a) Of the above claim(s) 41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of claims 21-40 in the reply filed on January 10, 2006 is acknowledged. The traversal is on the ground(s) that the example method as suggest by the examiner is not different than the method set forth in the claim of group II. This is not found persuasive because in the claim of group II requires injection molding machine which is not "manually injection molding".

The requirement is still deemed proper and is therefore made FINAL.

In the instant application, claim 21-40 have been considered and examined, claim 41 has been further withdrawn from further consideration.

Information Disclosure Statement

The information disclosure statement filed July 1 and July 29 of 2005, fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 21-24, 33-34 are rejected under 35 U.S.C. 102(e) as being anticipated by LaMarca et al. [2002/0175791].

LaMarca discloses an electrical part comprising:

- an electrical structure element of coil wire 44;
- a basic body 42 formed of first hard thermoplastic synthetic [liquid crystal polymer] having first melting temperature on which the structure element is arranged;
- an encapsulation 12 tightly surrounding structure element [provides hermetic seal for the solenoid 10] formed of second hard thermoplastic synthetic material having second melting temperature which is higher than first melting temperature , wherein material of the encapsulation is intimately fused with material of the basic body so as to embed the structural element free of gap and voids [see abstract; para 0039; claims 6-8; figure 1-5].

With respect to claim 23, basic body 42 having cylindrical portion 52 about which the coil 44 is arranged.

With respect to claim 24, LaMarca discloses a cylindrical portion having collar 50 at one end and connection head 54 at the other end [figure 2].

With respect to claim 33, LaMarca discloses a longitudinal bore 14 [fig 2].

With respect to claim 34, LaMarca discloses encapsulation has a circular-cylindrical outer surface.

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An improved solenoid is provided that has a fully enclosing yoke with integral end cap and sleeve. A second, separate, or alternatively integral end cap with sleeve is provided to complete the magnetic yoke. The yoke/coil assembly is encapsulated with a liquid crystal polymer that has a melting temperature higher than the melting temperature of the coil bobbin to provide a good bond therebetween.

[0039] During the preferred injection molding encapsulation process, the encapsulation 12 material cools as it is forced into contact with the yoke 60 and coil 40. Applicants have found that if the bobbin 42 has the same or similar melting point as the encapsulation 12, a good adhesion bond will not always be formed between the encapsulation 12 and the coil 40. Applicants have found that by having the bobbin 42 constructed from a material with a melting point lower than the melting point of the encapsulation 12, the exposed portions of the bobbin 42 will form a good bond with the encapsulation 12. In applicant's experience, a melting point differential of approximately 10 degrees Fahrenheit may be sufficient. Referring back to FIGS. 4, 6 and 7, openings 98 may be provided to allow the encapsulation 12 to more easily fill the space between the coil 40 and the yoke 60.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaMarca in view of Shimada et al. [2002/0026929].

LaMarca discloses the invention as claimed as cited above except for the basic body includes at least one protruding rib and at least one under cut for synthetic material of encapsulation is engaged.

Shimada discloses a basic body having protruding rib 2B' and under cut 2C both formed on cylindrical part of the body near the connection head 9 having connection pins 18' where coil end contacts at 18a embedded in resin 43 [figures 22-24].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide protruding ribs as taught by Shimada to the basic body as disclosed by

LaMarca. The motivation would have been to facilitate winding connection of the structure. Therefore, it would have been obvious to combine Shimada with LaMarca.

3. Claims 30-32, 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaMarca in view of Widiger et al. [6114933].

LaMarca discloses the invention as claimed as cited above except for the coil including main winding and auxiliary winding.

Widiger discloses coil 40 having main winding 58 wound on the basis body 48 and auxiliary winding 56 wound on main winding, connection pins 61 [electric terminal] disposed in socket 60 [col 4, lines 45-47; figure 1].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have two windings as taught by Widiger to the structure element as disclosed by LaMarca. The motivation would have been to provide inductor function for the structure. Therefore, it would have been obvious to combine Widiger in view of LaMarca.

With respect to claim 32, the claim is rejected due to the number of turn of windings depending upon the operating function of the structure, which requires a specific result.

With respect to claim 37, Widiger discloses winding 56 connected to connection pin 61 insertable to socket 60, a basis body 48 having longitudinal bore and encapsulation 194 surrounding structure element [figure 27].

With respect to claims 38-40, LaMarca in view of Widiger discloses the claimed invention as cited above except for the size of the diameter of the circular cylinder outer surface of plug pin being smaller than inner diameter of longitudinal bore of basic body formed in the basic body of the plug socket. It would have been an obvious matter of design choice to select the diameter of the plug pin smaller than that of the bore of basic body, since such a

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modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Kuhle* 188 USPQ 7 (CCPA 1975)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh T. Mai whose telephone number is 571-272-1995. The examiner can normally be reached on 5/4/9 Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Anh Mai', with a long, sweeping horizontal stroke extending to the right.

ANH MAI
PRIMARY EXAMINER